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Serial No. 09/936,983

Reply to First Office Action dated: 06/29/06

Response dated: 08/22/06

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Amendments to the Claims

Please cancel claims 1-12 without prejudice and replace with new claims 13-28.

13. (New) A method for recording a bitstream on a bitstream recorder such that the recorded bitstream can be replayed in a trick play mode, the method comprising:

recording said bitstream in predetermined-size stream object units, said recorded bitstream having data contained in application packets that are contained in said stream object units;

defining access units as parts of said recorded bitstream that are accessible for said trick play mode, wherein access unit information is associated with said bitstream and with related navigation data to be recorded; and

recording an access unit start map for said access unit information, wherein in said access unit start map a respective flag is assigned to each one of said stream object units, each of said flags indicating with a first value that the start of one of said access units is contained within a range of said recorded bitstream consisting of a corresponding stream object unit and the immediately subsequent stream object unit, or indicating with a second value that no corresponding access unit exists for that flag and its related stream object unit.

14. (New) The method of claim 13, wherein said access unit information includes an access unit start location list having a number of entries that matches the number of flags in said access unit start map having said first value, and wherein each successive flag of said access unit start map having said first value is associated with a corresponding location information in said access unit start location list, which in turn identifies the location of a first application packet of the corresponding access unit within the corresponding stream object units.

15. (New) The method of claim 13, further comprising the step of:

recording an access unit end map for said access unit information, wherein said access unit end map comprises a bit array of a same length as said access unit start map, and wherein in said access unit end map a respective flag is assigned to each of said stream object units, said flag indicating with a first value that the associated stream object unit contains the end of one of said access units,

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the beginning of which has been indicated by a flag within said access unit start map. **AUG 22 2006**

16. (New) The method of claim 15, wherein said access unit information includes an access unit end location list having a number of entries that matches the number of flags in said access unit end map having said first value and wherein each successive flag in said access unit end map having said first value is associated with a corresponding location information in said access unit end location list, which in turn describes the location of the last application packet of the corresponding access unit within the corresponding stream object units.
17. (New) The method of claim 15, wherein the index of each access unit end map entry having said first value is equal to or greater than the entry index of its corresponding access unit start map entry having said first value, and is less than the index of the immediately following access unit start map entry having said first value if any following access unit start map entry exists.
18. (New) The method of claim 16, wherein the index of each access unit end map entry having said first value is equal to or greater than the entry index of its corresponding access unit start map entry having said first value, and is less than the index of the immediately following access unit start map entry having said first value if any following access unit start map entry exists.
19. (New) The method of claim 13, wherein said trick play mode includes at least one of a fast forward, fast reverse, slow motion, single picture step and still picture trick play modes.
20. (New) The method of claim 13, wherein the recorded bitstream contains access unit start and access unit end marks which indicate the start or the end of an access unit, respectively.
21. (New) The method of claim 13, wherein said access unit start map is byte aligned and wherein, if the concatenated access unit start map entries consist of a

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number of bits which is not an integer multiple of eight, then the remaining least significant bits of the last byte of the access unit start map are filled with a corresponding number of padding bits.

22. (New) A method for replaying in a trick play mode a bitstream that was recorded on a bitstream recorder according to the method of claim 13, said method comprising the step of:

replaying in said trick mode the parts of the recorded bitstream which are related to the access units that are selected by evaluating the flags in said access unit start map.

23. (New) The method of claim 22, wherein said access unit information includes an access unit start location list having a number of entries that matches the number of flags in said access unit start map having said first value, wherein each successive flag of said access unit start map having said first value is associated with a corresponding location information in said access unit start location list, which in turn describes the location of the first application packet of a corresponding access unit within the corresponding stream object units, and

wherein said bitstream parts replayed in said trick mode are selected by evaluating the flags in said access unit start map and the corresponding location information in said access unit start location list.

24. (New) The method of claim 22, further comprising the steps of:

when replaying in said trick mode corresponding parts of the recorded bitstream, said parts are also related to access units that are selected by evaluating the flags in an access unit end map,

wherein an access unit end map is additionally recorded for said access unit information and said access unit end map is a bit array of the same length as said access unit start map, and wherein in said access unit end map one flag is assigned to each one of said stream object units, said flag indicating with a first value that the associated stream object unit contains the end of one of said access units, the beginning of which has been indicated by a flag within said access unit start map.

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25. (New) The method of claim 24, wherein said access unit information includes an access unit end location list having a number of entries that matches the number of flags in said access unit end map having said first value, wherein each successive flag in said access unit end map having said first value is associated with a corresponding location information in said access unit end location list, which in turn describes the location of the last application packet of the corresponding access unit within the corresponding stream object units; and
wherein said bitstream parts replayed in said trick mode are selected by additionally evaluating the flags in said access unit end map and the corresponding location information in said access unit end location list.

26. (New) The method of claim 24, wherein the index of each access unit end map entry having said first value is equal to or greater than the entry index of its corresponding access unit start map entry having said first value, and is less than the index of the immediately following access unit start map entry having said first value if any following access unit start map entry exists.

27. (New) The method of claim 25, wherein the index of each access unit end map entry having said first value is equal to or greater than the entry index of its corresponding access unit start map entry having said first value and is less than the index of the immediately following access unit start map entry having said first value if any following access unit start map entry exists.

28. (New) A bitstream recorder comprising:
means for recording a bitstream using a method according to claim 13; and
means for replaying in a trick play mode a bitstream using a method according to claim 22.

Support for the Applicant's new claims can be found specifically on page 1, lines 15-17, page 2, lines 10-35, page 3, lines 26-27, page 4, lines 19-20 and 26-27, page 5, lines 4-5 and 9-10 and 20-21, page 11, line 26, page 12, lines 15-18, page 14, lines 28-30, page 15, lines 3-7 and 18-27 and Figs. 3-5 and 10-11.